

DxSpot

Version 1.0



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DxSpot Overview

Description

DxSpot allows you to access the Amateur Radio DX Cluster network from your iPhone, iPad or iPod touch device and supports communication utilizing 3G, 4G or WIFI.

With DxSpot you connect to the DX cluster of your choice. Select a DX cluster from the included database containing over 300 Internet telnet clusters. Optionally private clusters connection parameters can be specified.

Please note: This application is for licensed Amateur Radio operators. A valid amateur radio call sign is required. In addition, DX Spot connects to privately owned DX Clusters where the cluster system operator determines access and availability. Please refer to <http://www.GreenCreekTechnology.com/apps/DxSpot> for more information.

Features

DxSpot is a tab-based application providing the following features:

1. Cluster selection from internal database containing over 300 Internet telnet clusters
2. Customize connection parameters allowing access to private clusters
3. Automatic logon to the selected cluster. The logon sequence supports optional password entry
4. Telnet access to the cluster console.
5. Ability to enter cluster commands
6. Monitors DX spots in real time creating a formatted table display
7. Display users currently connected to the cluster
8. Automatic QRZ.COM WEB page search by DX, spotter or user call sign
9. Display WWV propagation reports. Propagation data is colorized to visually indicate propagation conditions
10. DXCC entity information display that includes: DXCC country name, flag, DXCC prefix, entity number, continent, CQ / ITU zones, latitude / longitude and GMT time offset
11. DXCC entity location is displayable on the world map
12. Display cluster announcements
13. Display DX news from the Ohio/Penn DX (OPDX) bulletin WEB site

Cluster Database

The included cluster database contains the connection parameters for over 300 Internet telnet DX clusters. Connection is simple. Just tap on the cluster you wish to connect to. DxSpot automates the connection and logs on to the selected cluster. Once a logon has completed, the DX Spot table is displayed.



The DX cluster database is sorted alphabetically by DXCC country name. Each table row contains an Icon that represents the cluster type, the cluster call sign, connection URL and port. Supported cluster types are DX Spider, AR and CC clusters.

Tap a table row in order to select the cluster and begin the connection / logon process. For the connection and logon to succeed you must have set your call sign and optional logon password. Set your call sign and optional password using the Settings app. Refer to settings section below.

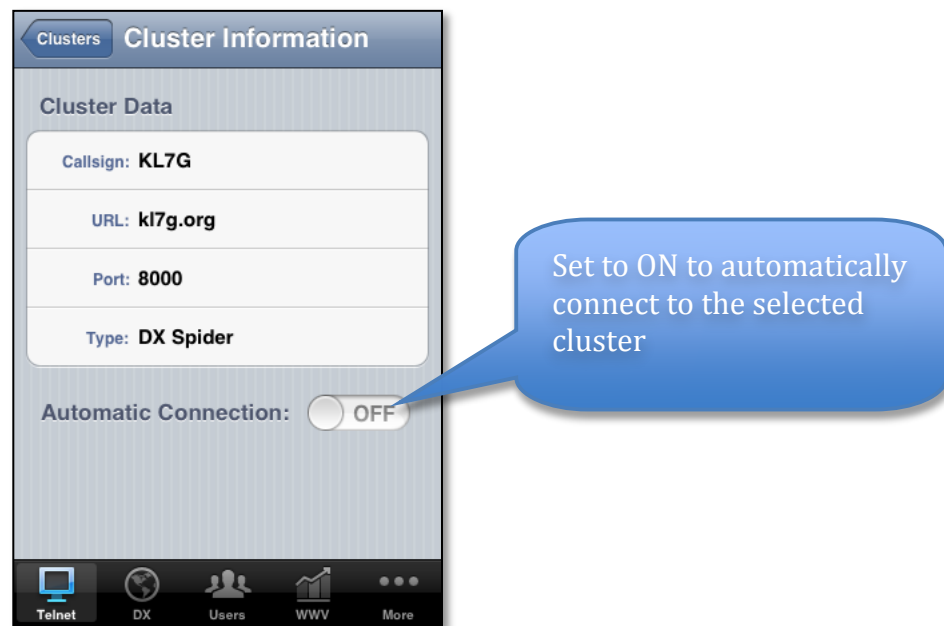
Cluster Information

Tap the disclosure button  at the end of each row to display the cluster connection data. Cluster connection data consists of:

- Cluster call sign
- Connection URL
- Connection Port
- Cluster Type

The **Automatic Connection** switch controls whether or not the selected cluster is automatically connect to when the application is activated. When the Automatic Connection switch is initially switched on, the cluster connection data is saved in system settings.

To change the automatic connection to a new cluster, selected the new cluster and turn the automatic connection switch to on. Connection to the old cluster is automatically turned off.



You can customize the internal cluster database parameters or enter private cluster parameters using the iPhone/iPad Settings application.

Settings

The Setting application is used to enter your call sign, optional logon password, and optionally tailor cluster connection data. The only mandatory data to be entered is your call sign. DX clusters will not allow connection without a valid Amateur radio call sign.

Setting your call sign

To set your call sign start the Settings application. Scroll down and tap the DxSpot entry. When the DxSpot settings view is displayed enter your call sign in the **MyCallSign** field.

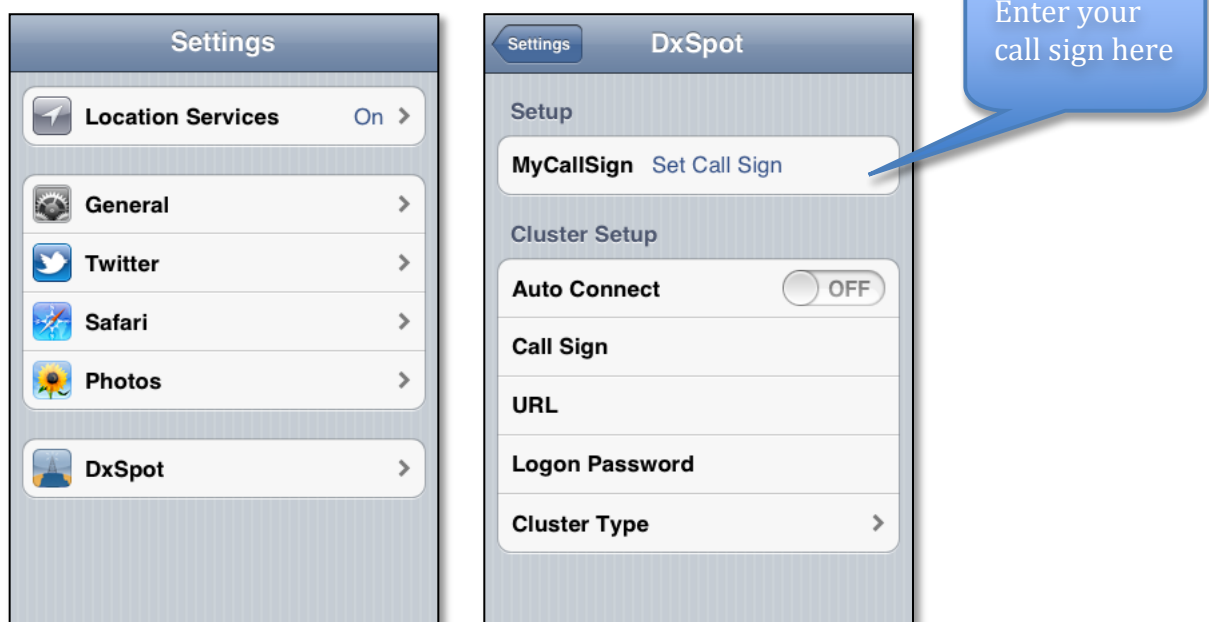
Setting cluster connection parameters

Cluster connection parameters are saved to system settings just by selecting the cluster from the database and turning on the **Auto Connect** switch. If your cluster is not defined or the parameters have changed they can be entered in the Cluster Setup section. Enter the DX cluster call sign, URL, port, and the cluster type. Supported cluster types are DX Spider, AR and CC clusters.

The **Auto Connect** switch determines if DxSpot should automatically connect to the selected cluster whenever the application becomes active.

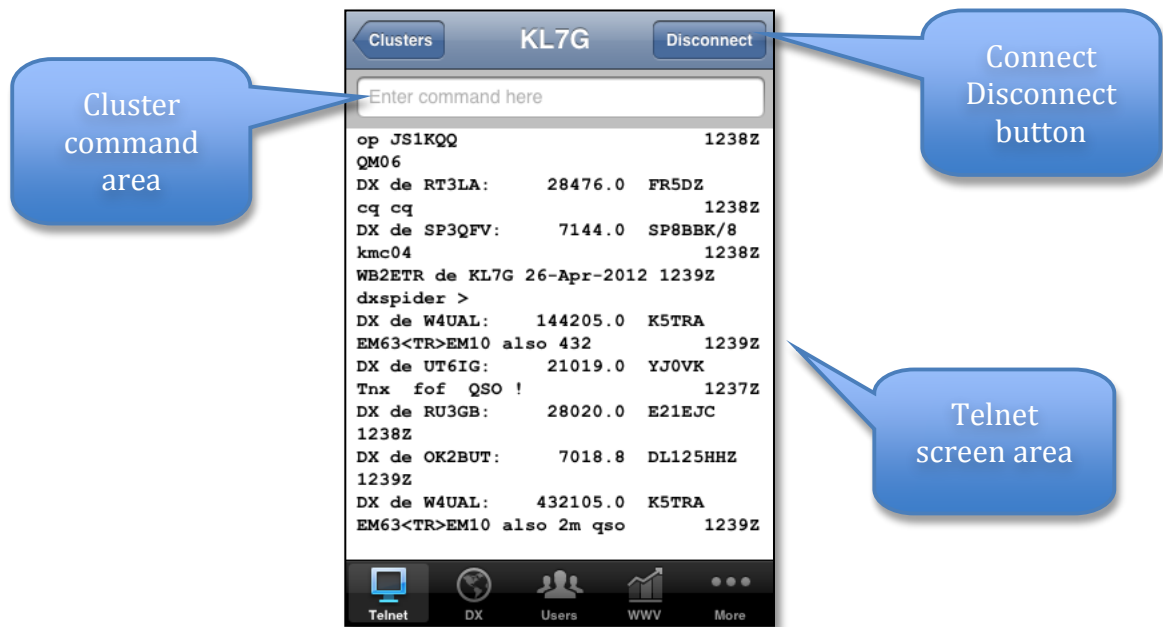
Setting a logon password

If your cluster requires a logon password, enter it in the **Logon Password** field.



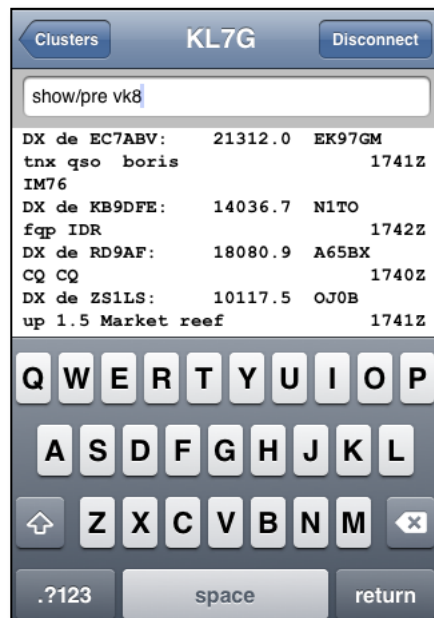
Telnet

The **Telnet** tab provides access to clusters console display. Cluster commands can be entered into the cluster command area. Only cluster authorized commands may be entered. Check with the cluster SYSOP for allowable commands.



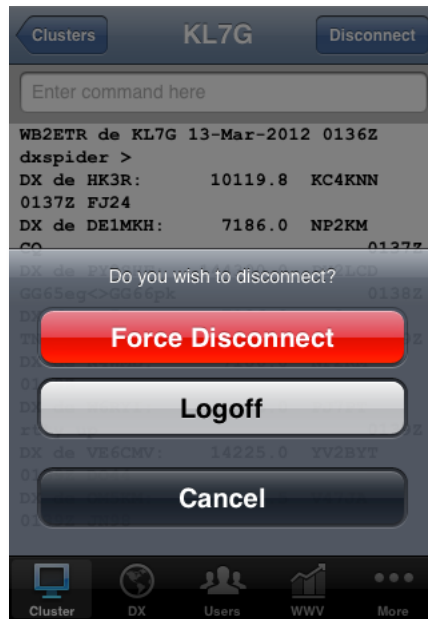
Entering Commands

Cluster commands can be entered in the command area. Enter a cluster command then tap return on the keyboard. The resulting output from the command is displayed in the telnet screen area.



Connect and Disconnect

The Connect/Disconnect button controls the connection to the DX cluster. When the Disconnect button is pressed the following is displayed.



The **Logoff** button sends the cluster bye command then disconnects from the cluster. This is the button that is normally used.

The **Force Disconnect** button immediately disconnects the session with the cluster.

The **Cancel** button dismisses the disconnect request.

DX Spots

The **DX** tab displays the DX spot table. DX spots are collected in real time and displayed in a formatted table. Each row of the table consists of two lines containing the following information.

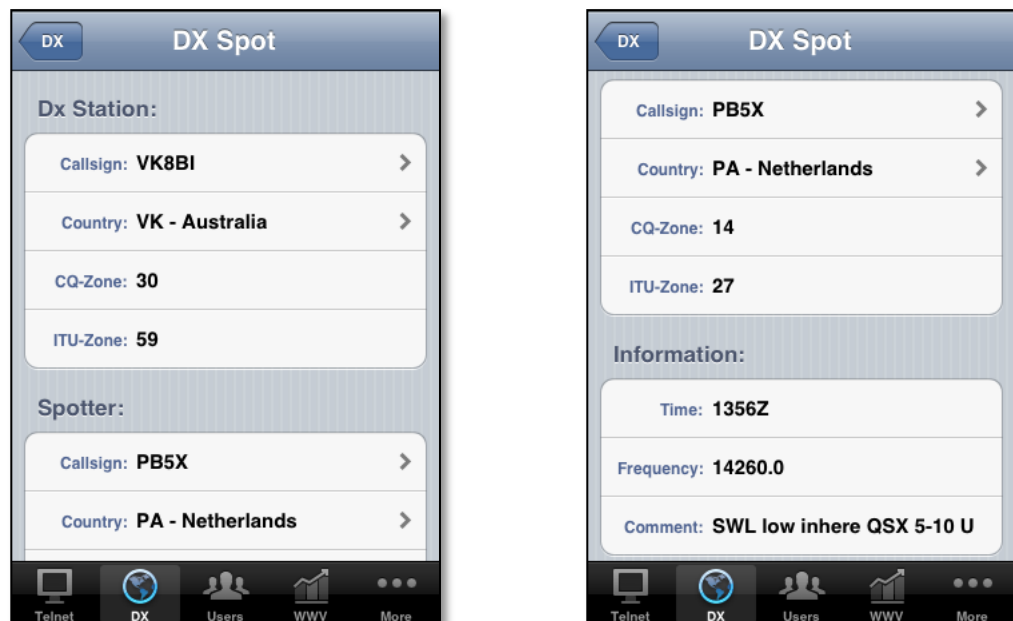
1. Line one contains the DX station call sign, frequency, and UTC time of the spot.
2. Line two displays the spotter's call sign and comment.



The screenshot shows a mobile app interface with a table titled "DX". A blue callout bubble points to a refresh icon in the top right corner of the table header, with the text "Refresh DX spots". The table contains several rows of spot data, each with two lines of information: station call sign, frequency, and UTC time on the first line; and spotter's call sign and comment on the second line.

DX Station	Frequency	UTC Time	Spotter	Comment
A61UU	21240.0	1357Z	S51HH	
VK8BI	14260.0	1356Z	PB5X	SWL low inhere QSX 5-10 U
GS4MWS/A	7170.0	1356Z	MM0IMC	Strong QSB, getting weake
VK8BI	14269.0	1356Z	IZ1FXO	59 in savona 70 Noedwest
EK6LP	21029.5	1355Z	BD7APL	tnx qso vy73
5P4MG	142575.0	1355Z	IZ0JGE	Tnx by Rome
VK8BI	14260.0	1355Z	UA1AKJ	QSO 14270.00 OC185 sp
BG2AUE	14250.0	1355Z	R4AN	tnx qso
G0QBC	21072.5	1352Z		

Tap a row to display expanded and additional information about the spot.



The two screenshots show the expanded view of a DX spot. The left screenshot shows the "Dx Station" section with fields for Callsign (VK8BI), Country (VK - Australia), CQ-Zone (30), and ITU-Zone (59). The right screenshot shows the "Spotter" section with fields for Callsign (PB5X) and Country (PA - Netherlands). Both screenshots also show an "Information" section with fields for Time (1356Z), Frequency (14260.0), and Comment (SWL low inhere QSX 5-10 U).

Section	Field	Value
Dx Station	Callsign	VK8BI
	Country	VK - Australia
	CQ-Zone	30
	ITU-Zone	59
Spotter	Callsign	PB5X
	Country	PA - Netherlands
Information	Time	1356Z
	Frequency	14260.0
	Comment	SWL low inhere QSX 5-10 U

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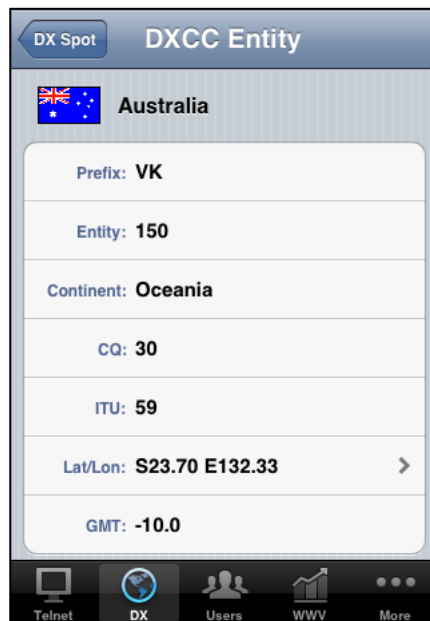
QRZ.COM Display

Tap the **Call sign** field of either the DX station or the Spotter to display the QRZ.COM WEB page for that station.



DXCC Entity Display

Tap the **Country** field of the DX or spotter station to display the DXCC information for that call sign.



DXCC Entity World Map Display

Tap the **Lat/Lon** field to display the DXCC country location on the world map.



User

The **User** tab displays a list of user currently connected to the cluster.



Tap a call sign to access the users QRZ.COM WEB page.

WWV

The **WWV** tab displays a list of WWV reports. The cluster you are connected to determines the number of reports in the table.

Each WWV report consists of the Date, Hour, Solar Flux Index (SFI), A index, K index the current forecast followed by the forecast for the next 24-hours.

The SFI, A and K index numeric values are evaluate and displayed on a colored background. The background color visually represents the value as they pertain to good operating conditions. Shades of green color indicate good values, shades of yellow indicate medium values and shades of red indicates poor values.



Date	Hour	SFI	A	K
19-Apr-2012	12	122	8	1
No Storms -> No Storms				
19-Apr-2012	09	122	8	1
No Storms -> No Storms				
19-Apr-2012	06	122	8	1
No Storms -> No Storms				
19-Apr-2012	03	122	8	1
No Storms -> No Storms				
19-Apr-2012	00	122	8	2
No Storms -> No Storms				

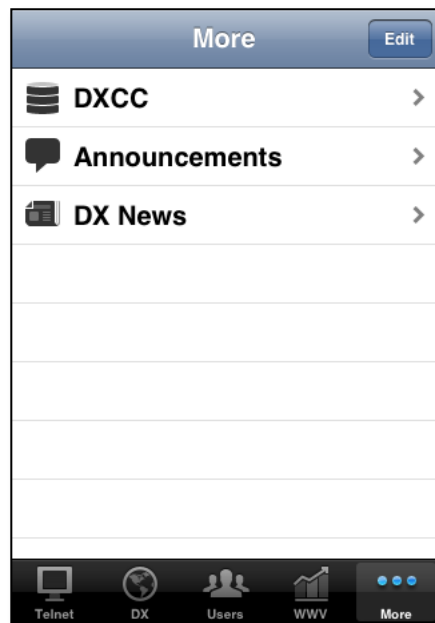
The WWV report contains the following information.

- Date - The date of the WWV report
- Hour - The hour of the day of the report
- SFI - Solar Flux Index
- A - A index
- K - K index
- Forecast – Space weather for the past 24 hours followed by the next 24-hour prediction

More

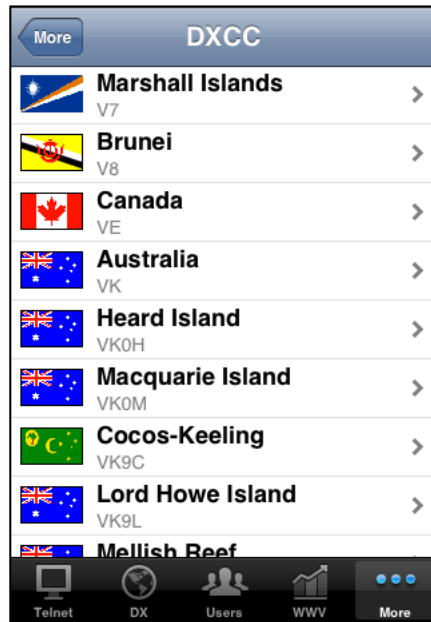
The **More** tab contains additional tab displays not available on the main tab bar. The additional tabs are:

- **DXCC** - tap to display DXCC entity information
- **Announcements** - tap to display current cluster announcements
- **DX News** - tap to display DX news



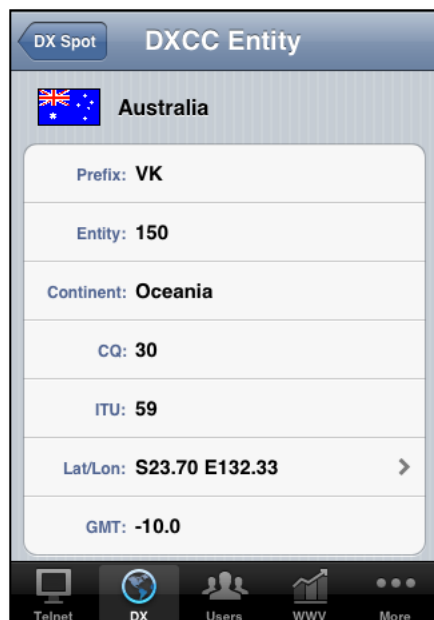
DXCC

The **DXCC** tab displays a table containing information about the DXCC countries. Tap on a DXCC country to display detailed information about that country. The DXCC country table is sorted by DXCC prefix.



DXCC Entity and World Map Display

The DXCC Entity displays the DX country prefix, entity number, continent, CQ / ITU zones, Latitude/Longitude and the GMT offset in hours. Tap the **Lat/Lon** field to display the world map showing the DXCC country location.

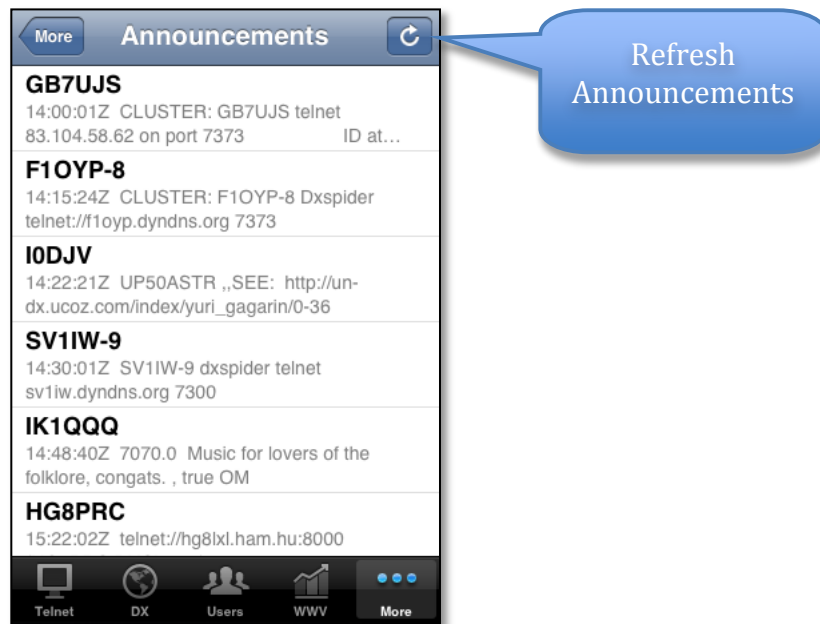


Announcements

The **Announcement** tab displays the current announcements posted on the cluster.

Each announcement contains the following information:

- Call sign of the poster
- UTC time of the post
- Message text.



DXCC News

The **DX News** tab displays a list of DX news sources. This release presents only a single news source.

DX news is obtained from the Ohio/Penn DX bulletin WEB site. Tap on the **OPDX Bulletin** row then tap on the bulletin you wish to read. The back button can be tapped to return to a previous page.

